water and a basket of logs; she pours water and grinds unceasingly, bored to tears, and then scoops the paste into separate dishes for use on face, body and legs. 303 512

Our toilet to this day never included imported combs. Even the most frivolous girls in the University prefer Burmese combs. Burmese women, unlike Siamese and modern Chinese and Japanese women, wear their hair long without exception, and European combs could never cope with so much work. At one time, the village girls did favour long, bright bakelite combs to wind the hair around in a knot at the back, but the fashion was ridiculed as "aeroplane head-dress" and soon died. Burmese utility combs for general use and for distribution to servants of the household are made of wood and shaped according to use: for combing the hair are those with slightly curved rims, two inches wide and six inches long; for the little girls to stick in front of their knots and for women to form a frame for their formal hairdressing are small ones, almost semi-circular in the curve of the rim; for the women to wind their hair into a knot on less formal occasions are almost straight-backed combs; for dalousing are fine, double-edged combs. My mother chose wooden combs for smoothness and stoutness and put them at the bottom of the sesamum oil jar until the brittle yellow wood turned a deep rich brown. These combs, with teeth that bite and rarely break off, can be bought for three annas. We also had ivory and tortoise-shell combs for superior use. 302 412

Burmese blacksmiths have been busy since olden days, producing weapons for the hill people, agricultural implements, scissors, nut-crackers and fire-irons, and, above all, blades of all kinds (*dahs*). The dah is the universal implement in Burma. It serves as a fighting weapon in the form of a long *dahs*, a slender pointed steel blade, about 15 inches long, fixed by a tang into a long handle of cane 326 412

326 412 or bamboo, iron-bound or tightly whipped to prevent splitting. In the form of a shorter dalwé, with or without a point, it is used as an all-round implement in house-building. With this bamboos are hewn, split open and slit into widths, boards of bamboo or planks are chopped for floor-boards and timbers are hewn for posts. The short, broad-ended *dahmas* are used for heavy chopping and were the general choppers for meat and firewood in our kitchens. The dahma is a stout iron blade faced with steel. Lighter paring knives called *damauks* are also produced. Thus a Burman in a village normally carries a dah of some sort tucked into his waist as he sallies forth perhaps to find some firewood, house-building material or an enemy. The Shan people also had long murderous-looking dagger knives called *damyaungs*.

The iron-workers of Magwe sent us scissors which my mother preferred to stainless steel ones because they could be oiled and sharpened throughout a lifetime, and because they had inscribed on one blade her name and on the other "Health and wealth to you". We got our betel-nut crackers from there also; these had a blade on one arm, to cut as well as crack.

276 415 511 Our house, like every Burmese house, kept a betel box always ready for visitors. The box had a top tray with little cups or boxes for the chopped areca nut, orange peel, spice seeds and lime, and a bottom compartment for fresh betel leaves of the betel vine (*piper betle*). A deep cover fitted the whole box. Grown-ups smeared lime on a leaf, wrapped nuts and spices in it and chewed it, spitting out the red juice which is too strong to be swallowed. Betel has an astringent action in the mouth and by promoting the flow of salivary juices it aids digestion. Our betel boxes were of richly carved silver, with embossed designs of elephants, princes riding on horses in the forest, heavenly male and female spirits, all looking very alive. Silver carving is one of our show industries; the silversmiths at Mandalay and Moulmein produce handsome bowls, boxes, dagger handles and various other objects bought by foreigners. Burmese people do not have the custom of buying *objets d'arts* for their houses, but the articles of daily use which they like to have of good quality and pleasing designs are the real inspiration of these traditional crafts of Burma. The silver used ranges from rupee fineness up to the pure metal called *baw*. We had silver bowls, *ngway-balas*, of all sizes, smaller ones for drinking, bigger for pouring the bath-water, and enormous ones about twelve inches across for holding gifts to the monks on festival days. Sometimes my mother used these to hold *taik-pan*, the flowers of the honolulu creeper, for the drawing room, but she always preferred a religious use for such noble and valuable objects. I liked all these bowls very much; they had good proportions, round the rim and base was a border of formal scroll

326 412 531 511 [953]

design and, within this chaste frame, the elephants, princes, trees and *nat* spirits waved and bounded in profusion. At the base of each bowl was a felicitous salutation inscribed on a smooth ground.

Lacquer is another industry now turning out cigar and trinket boxes, table mats, bowls and other articles for the modern market, but also continuing to supply all Burmese households with objects for daily use. When my father was stationed at Magwe, we went up the river to Pagan and from there by bullock cart to the village of Nyaung-U where the best Burmese lacquer is made. A frame of bamboo strips woven closely is covered and filled out with a mixture of cow-dung and paddy husk, and given a thick coat of black *thitsi*, wood-oil. Traditional designs are engraved on this when dry, and successive coatings of thitsi mixed with colouring are put on, the bowl being allowed to dry and turned on a lathe to take off the colour not required in the pattern in between each coating. The finished product is polished smooth and so flexible that a bowl can be bent till the opposite sides of its rim touch. We had lacquer boxes, *yun-its*, of great size to hold my father's turbans and my mother's scarves, round ones to hold combs and tresses for my mother's hairdressing, drinking mugs, betel boxes and many others. We had *kyauk-ka*, a more solid lacquer of plain red and black, for food carriers. with plates and cups to match.

Wood seems part of the fabric of the Burmese craftsman's being. The wealth of the forests which provided teak, pyinkado, ingyin and a host of other woods for lasting structures; the perfect medium they afforded to the chisel, gouge and mallet of the carver, and the traditional forms of architecture which offered vantage points for the display of superb craftsmanship all combined to make wood-carving the most lively of Burmese arts. But wood-carving cannot be seen to advantage in domestic articles; we had carved wooden frames for photographs of monks and of Grandfather, carving on the screen which walled off the altar room, but Burmese carvers in wood had never devoted their talents to the cutting of small articles. Teak and *yamanè*, the two woods usually carved on, have a coarse grain in which fine detail cannot be rendered. Beginning from the days when the tradition was to reserve carving for the wood of sacred structures only—palaces and monasteries—the craftsman had put all his skill into animating the gables and eaves of tiered monastery roofs, palace walls and ceilings, with a riot of living ogres, nats, dancing spirits and birds surrounded by leaves, flowers and scroll work which did not leave an inch bare.

Still, the village craftsman with a talent for work in wood does not lack scope in his rural surroundings.

501 396 His constructive skill with wood has been most successfully expressed in the vehicles for land and water transport—the bullock cart and the canoe. The classic pattern for a Burmese boat is the *laung*, built from a single hollowed-out trunk of the *thingan*, a tough tree growing near the water with a girth of 4—20 feet and a height of 15—75 feet. The trunk is hollowed out into a rough hull, the outside is adzed, circles of holes are bored through for a guide, and the shell is hollowed to a uniform thickness. It is then waterlogged, and fired slowly, the symmetry being carefully tended as the hull opens out with the firing. Planks are built up on the sides to increase capacity. These laungs, of a capacity from 10—40 tons, are the universal canoes of the rivers and creeks of Burma. Poled upstream and rowed downstream, they are ideal in the ease with which they can be bumped against rocks or got off shoals, the thingan hull lasting for 20 or 30 years. The bigger boats which still carry rice and other produce up the Irrawaddy are built up from stout ribs on a style which simulates the solid hull of the laung. These boats carry enormous sails and a crew of about fifteen men. Their bulk-heads are richly carved, and they glide along the great Irrawaddy, stately and calm beside the chugging river-steamers, their prows rising and falling like the heads of some fabulous birds.

493 The Burmese cart is a poem in curves of wood. The floor of the cart gives a slight curving sweep from front to back, the sides exaggerate this in crescents that sweep right up into the air, and the circle of the wheel has good balance and strength behind its symmetry. For the sake of the curves, the root wood of cutch and the curved branches of thingan are specially sought out.

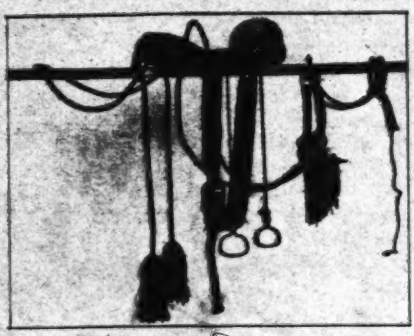
• 326 788 534 Brassware, for which the old centres were at Amarapura and Sagaing in Upper Burma, we were familiar with in bells and gongs. Bells are kept by the Burmese for sacred uses only. The delicate small bells hung high around the spires of pagodas, often of gold and silver, have tongues that are moved by the winds to give a sweet testimony, to all spirits, of the good work of men who built the pagoda and other men who pray below, and give the praying devotee a tinkling reassurance of his merit. The great big bells, however, made of molten copper and tin poured into moulds of clay and wax in pits dug in the earth, have no tongues; but when struck with deer's antlers or a wooden striker they [552] sing a deep note of sweetness. The names given to some famous bells reflect their beauty: *Maha Ganda* (Great Voice), *Mahatti Thadda Ganda* (Great Sweet Sound). All big bells are hung on a cross bar with wooden supports at pagodas, where after recitation of precepts we picked up the striker in turn and struck three times to announce to the spirits

around that we had meritoriously praised the Lord Buddha, and then touched the earth with the striker to pass the message to the spirits there also. These big bells may weigh up to 25 tons; the bell at Mingun is said to be the second largest in the world. They are all inscribed with lauds and invocations for the welfare of the donor. Gongs of brass are the bells of the town-crier; all announcements are punctuated with the striking of a gong. *Maung le htu tè* is the equivalent of "broadcasting it around the town". Much attention is paid to the melodiousness of gongs for the Burmese have a musical instrument called the *kyi-waing*, which is a circular frame on which graduated gongs are hung and beaten with a knobbed stick to harmonize with the rest of a Burmese orchestra.

There were numerous other objects for which my mother would never accept a substitute from English shops because they did not cater for our ingrained customs. Soup never tastes right when eaten with a metal spoon—we always used Burmese china spoons bought for about one anna each; rice is not to be stirred with a metal utensil either—the Burmese wooden ladle for this is the *yaung-ma*, the same word as for sister-in-law, the stirrer of trouble. There were, of course, particular places in Burma which supplied particular articles of dress, but I took an interest in this only when I was grown up.

What delights me is to find now that, in the imported things about the house also, all minkadaw households bought a standard type. This was probably due to the enterprise of Messrs. Rowe and Co., a Rangoon firm selling general goods, which established branches in all district towns to provide officers with anything they could not buy in native shops. We all bought Gold Medal camp chairs and camp cots from Rowe's. We bought durwan's kerosene lamps for bedrooms, Storm King and Petromax lamps with incandescent mantles for sitting and dining rooms, we bought crockery which came out in three or four good standard patterns, with an adaptation from the orthodox English dinner service to provide soup and curry dishes suitable for Burmese meals. We got cane furniture made in the local jails, odd chairs and always the half-wood half-cane stores box to serve on tours, and the long basket trays in which my father's files and papers would come home and go to the office every day, on the head of the *chaprassi*. The *hpas*, soft expandable cane boxes in which Burmese people pack their bedding when travelling, were always covered with green canvas from Rowe's. With these hpas, matching the Gold Medal camp cots and chairs, the boxes from the jails, a clerk and two or three girls looking after the children, and a general air of solicitous attention from the people around, no one could mistake an a-so-ya government official's family on its touring travels.

25: Ferrars E-5 (ca. 1890) 1901 API Burma
Burmese API



228. BURMAN HORSE FURNITURE.

gongs (*maung*, No. 322) have very sonorous qualities. Copper and brass utensils are not used by the Burmans for cooking, but brass is used for fruit-platters, water-cups and bowls, betel-boxes and spittoons, mortars, scales and weights, cow-bells, and furniture for horse and bullock harness.

The import of iron and steel began centuries ago, nevertheless blades of Shan steel and manufacture are still accounted the best. With the exception of Shan settlers, the Burmans were the only blacksmiths of the country till the Chinese blacksmiths arrived. The hill-people depended for their chief implement and their weapons upon the dominant races. The Burman forge is the same as the Shan, on a bigger scale. The hearth is at the ground-level, with a pit in front, to enable the smith to stand up to his work if needful. He does most of it sitting on a peculiar round-backed seat to the right of the blast. The anvil is like a hammer-head, set upright in a block of wood. There is a trough shaped like a canoe for quenching the work and the tools. The hammers are from one to five pounds, the pincers of the universal pattern. There are the ordinary punches and sets. The blast is on the plan of the bamboo blast in No. 235, but has large cylinders of palm trunks in which pistons, packed with feathers, are worked alternately. The Chinese blacksmith had already adopted the European anvil and heavy sledge-hammer for forging iron axles and tyres, anchors and grapnels. These the Burman has adopted in turn. The bench-vice is also universal. The Chinaman adheres to his horizontal wooden box-blast, fitted with valves like a double-action pump, whereas the

229. BURMAN BLACKSMITH (OLD STYLE).

25: Ferrars E-5 (ca. 1890) 1901 APl Burma
Burmese AP4

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326
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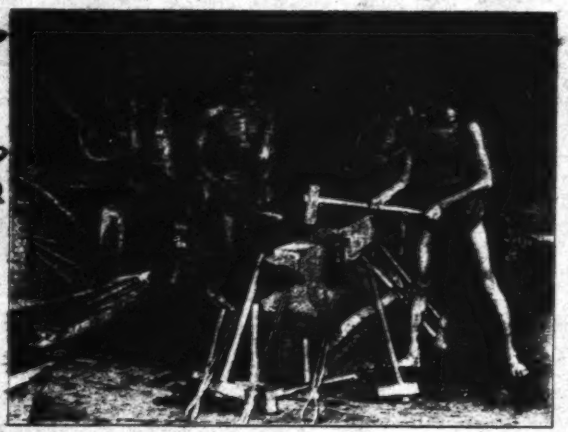

230. BURMAN BLACKSMITH (NEW STYLE).

Burman has copied the leather double-bellows from the steam-mill workshops.

Making *dâs* is the blacksmith's principal business. For the uses to which the Burman puts his *dâ*, he is not likely to be offered a better implement. The *dâ* is a blade twelve to twenty-four inches long, somewhat curved back from the edge, with the weight towards the point, and fixed by a tang into a long handle of cane or bamboo, iron-bound or whipped to prevent splitting. The *dâ* must not vibrate in the haft, and is for that reason not riveted through, so that when it works loose it can be driven tight again. Unless when both hands are used, the haft is gripped near the blade. Held in this way, the balance of the *dâ* is different to that of any other implement or weapon. It requires knack to use the *dâ* effectively. The long, slender, pointed *dâ* is the fighting weapon (*dalwè*), and is all of steel, with a cane handle. A shorter *dalwè*, with or without a point, is the universal implement. Short blunt-ended *dâs* are used for heavy work (*damâ*). These are only faced with steel. A light paring knife is called *damdauk*. There are dagger knives, but they are Shan rather than Burman implements (*dam-yâung*). The Burman and Shan smiths use a steel scraper set in a cross-handle, some-

231. SWORDSMITH.

25: Ferrars E-5 (ca. 1890) 1901. AP1 Burma
Burmese AP4.

232. CANOPY OF GREAT ZEDI (VI. 29. 30, 101).

thing like a spoke-shave (*daing-dyaik*), for the rough shaping of the blades after forging, to save their files. The blacksmiths make the axes of the country also. The old Burman axe consists of a long-handled wooden mallet with an iron tip like a small spade. The smiths also make spear-heads for the hill-people, iron shoes for ploughs, mattocks and hoes, tires and axles of carts, dee nails for boats, nippers for sugar-cane and betel-nut, and other tools. They do repairs of locks and fire-arms. A special class of iron-work is making *tî* for *zedi*. The tinsmith's trade was unknown in Burma until fifty years ago. In Pegu it is still in Indian hands; but in Mandalay the Burman tinsmiths are unequalled.

Argentiferous galena is found in Burma, but the ore barely repays working for the sake of the lead. The silver used in Burma and most of the gold is imported from China, India, and Europe. A dozen villages in different parts of Burma get a living by sifting the sand of streams which bear gold. A broad thin wooden dish shaped like a flat cone is filled with sand and gravel, and worked at the water-level with a rotary movement, by which the lighter material is driven out centrifugally. The dish is filled and refilled, and after seven or eight hours' work as many grains weight of gold flakes will have accumulated in the depression at the centre. The out-turn of a steady worker is three to five tikals of gold in the season.

233. MOUNTAIN CASCADE.

The stock in trade of the gold and silver worker consists of a bamboo blast, clay crucibles, blowpipe, solder and flux, aquafortis and mercury, hammers, punches and anvils of bronze and iron, wire-plate and beading-plate. Bullion is furnished by the customer, who pays from one half up to the full weight, in

25: Ferrars E-5 (ca. 1890) 1901 APl Burma
Burmese AP4

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234. WASHING FOR GOLD.

silver, of the work, for workmanship. The fineness of the gold used is from eighteen to twenty-two and a half carats. Copper is the alloy for gold (four to sixteen *yué* of copper to the *kyat* or tikal). Silver is used of rupee fineness (four *yué* of alloy to the *kyat*) up to pure metal (*bazo*). The intermediate fineness of sterling silver is the most usual. Silver is alloyed with copper and with zinc. With the few implements named above, plate for display and ornaments for women's wear are fashioned, of beautiful design and considerable finish. Chasing and *repoussé* ornament are used for the gold and silver plate, filigree and beading for the gold ornaments. Those who can afford it, serve drinking-water to their guests in a large silver bowl (*paldi*) holding a gallon or so, with a small *paldi* floating on the water. Other objects of luxury are silver lime-boxes, betel-boxes, hafts and scabbards of sabres. Broad zones of *repoussé*-work are relieved by fillets and beadings. The plain vessel having been hammered into shape is filled with a tough lac. This affords a ductile matrix, yielding where the chaser is applied and supporting the relief portions. The first step is to outline the work with a bronze punch, after which the lac is melted out and the metal annealed. Lac is poured in again, and a stage of relief raised. By successive annealings the full relief is obtained.* The figure designs are the signs of the zodiac, episodes from *zat*, and mythical animals. Women frequently carry some thousands of rupees worth of gold in the form

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415]
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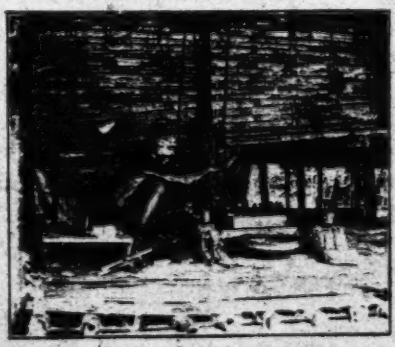

235. VILLAGE SILVERSMITH.

* The figure to the left in No. 237 is Go Tha Ban of Maulmain, the silversmith who designed and executed the tools used for the sides of this volume. The back is from the cover of a *Kambawsa*, to the colours of which it corresponds.

25; Ferrars E-5 (ca. 1890) 1901 AP1 Burma
Burmese AP4

[opp. p.108]

1326
415

SEE SILVER PLATE

25; Ferrars E-5 (ca. 1890) 1901 AP1 Burma
Burmese AP4

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237. TOWN SILVERSMITH.

of plain gold bangles (*lak-kauk*), and their ear-plugs consist of a roll of sheet-gold coiled to the thickness of a finger. The Burmans admire a red-yellow gold with dull surface. They enhance the effect by a red colouring of the interstices of the work, in the same way as the Chinese do. Neck ornaments (*bayè*) are of several kinds. The commonest one used to be the thick roll of gold filigree, worn in front of the neck. This is now replaced by *bayè* of several chains, for the most part jewelled. On the breast is worn the broad *dalizán*, also formerly of filigree, but now of jewels and pearls. Strings of real and imitation pearls are worn; and jewelled pins and gold or jewelled combs in the hair. Rings are worn on the fingers and gold filigree buttons of the Chinese type on the jackets. The last two are the only ornaments now used by men. Anklets are worn by children.

[562]

175
436
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Gold and silver coinage on a European model was adopted by the kings of Burma about the middle of the nineteenth century—the "peacock" coins, struck from dies engraved in Paris. Rough coins of lead used to circulate. The coins shown in No. 238 are those of Arakán kings from 1500 to 1750 A.D., from the collection of the late Mr. C. H. White. Before the introduction of coinage,

238. SILVER COINS OF THE ARAKAN KINGS.

25: Ferrars E-5 (ca. 1890) 1901 APl Burma
Burmese AP4

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239. GOLD-BEATERS.

circulates in Burma is three times the value of the lowest Indian coin. Notes have no circulation as yet among the Burmans, although they now bear their figures of value in Burmese.

316 Rubies and sapphires (*kyanmyat*) are separated from the
306 sand and gravel of certain localities, notably Mogôk, in the same way as gold is. Hard gems are cut with gem-dust on a horizontal wheel driven by a fly-
[822] wheel and treadle in a regular lathe-stand. Rock-crystal is cut in this way and also on a hone. Jade is found at Mogaung and is exported to China. Amber is found at Bamáw.

306 Gold-leaf is used in enormous quantities for gilding *zedi* and images. Only pure gold is employed. The paper for separating the gold-leaf in the book in

gold and silver bullion were used for exchange, as they still are in the Shan States. Chinese gold is current in the form of foil with the market stamp of fineness. It can be conveniently cut with scissors and weighed. Travellers often carry their bullion in this form. Silver is used by the Shans in the form of ingots which have to be hewn and assayed when making a purchase. The standard for commodities, wages and rent is silver, the fluctuation being referred to the gold. The lowest coin that

240. ALCHEMISTS.